Philips
LCD widescreen monitor

19.1" wide
WXGA+

190TW9FB

Digital HDTV monitor in a stylish package

Combine work and entertainment with this widescreen multi-function monitor! With a large, wide viewing area, TV, video and HDMI input plus built-in speakers, the Philips 190TW9 boosts your productivity and brings you ultimate enjoyment.

Outstanding front of screen performance
- Crystal Clear III for natural images with enhanced quality
- HD LCD display, with a 1440 x 900p resolution
- HD Ready for the highest quality display of HD signals
- 5 ms fast response time

Great convenience
- 2 HDMI inputs for full digital HD connection in one cable
- EasyLink: easy control of TV & connected device via HDMI CEC
- Smart mode selects a perfect mode for what you are watching
- Built-in TV tuner for viewing TV programmes on your PC monitor
- Easy-to-use remote control included

For advanced performance
- Incredible Surround for enhanced audio enjoyment

Ready for digital
- Integrated Digital Tuner for DVB-T reception

PHILIPS
sense and simplicity

LCD widescreen monitor
19.1" wide WXGA+

190TW9FB/00

Specifications

Picture/Display
- Aspect ratio: Widescreen
- Brightness: 300 cd/m²
- Contrast ratio (typical): 1000:1
- Response time (typical): 5 ms
- Viewing angle: 170° (H)/160° (V)
- Diagonal screen size: 19 inch / 48 cm
- Display screen type: LCD WXGA+ Active Matrix TFT
- Panel resolution: 1440 x 900p
- Picture enhancement: Crystal Clear III, 2D Combfilter, 3/2 - 2/2 motion pull down, White stretch, Progressive Scan, Smart Picture
- Screen enhancement: Anti-Reflection coated screen

Supported Display Resolution
- Computer formats

Resolution	Refresh rate
640 x 480	60 Hz
800 x 600	60 Hz
1024 x 768	60 Hz
1280 x 1024	60 Hz
1440 x 900	50Hz, 75Hz

- Video formats

Resolution	Refresh rate
480i	60 Hz
480p	60 Hz
576i	50 Hz
576p	50 Hz
720p	50, 60 Hz
1080i	50, 60 Hz

Sound
- Output power (RMS): 2 x 3W
- Sound Enhancement: Auto Volume Leveller, Incredible Surround, Smart Sound
- Sound System: Mono, Stereo

Convenience
- Clock: Sleep Timer, Start timer, Stop timer
- Connection Enhancement: Easy link
- Ease of Installation: Auto Programme Naming, Automatic Channel Install (ACI), Automatic Tuning System (ATS), Fine Tuning, PLL Digital Tuning, Plug & Play
- Ease of Use: Auto Volume Leveller (AVL), On-Screen Display, Programme List, Side Control
- Electronic Programme Guide: Now + Next EPG, 8-day Electronic Programme Guide
- Picture in Picture: Text dual screen
- Remote Control: TV
- Remote control type: RCPF05E08B
- Screen Format Adjustments: 4:3, Movie expand 14:9, Movie expand 16:9, Subtitle Zoom, Super Zoom, Widescreen
- Teletext: 100-page Smart Text
- Smart mode: Movie, Personal, Power saver, Standard, Vivid

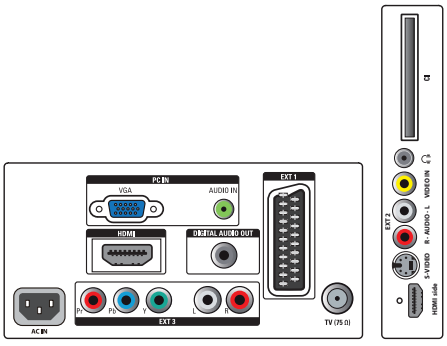
Tuner/Reception/Transmission
- Aerial Input: 75 ohm coaxial (IEC75)
- TV system: PAL I, PAL B/G, PAL D/K, SECAM B/G, SECAM D/K, SECAM L/L'
- Video Playback: NTSC, SECAM, PAL
- DVB: DVB Terrestrial*
- Tuner bands: Hyperband, S-Channel, UHF, VHF
- Tuner Display: PLL

Connectivity
- Ext 1 Scart: Audio L/R, CVBS in/out, RGB
- Ext 2: S-video in, CVBS in, Audio L/R in
- Ext 3: YPbPr, Audio L/R in
- HDMI 1: HDMI v1.3
- HDMI 2: HDMI v1.3
- EasyLink (HDMI-CEC): One touch play, System standby
- Other connections: Headphone out, PC Audio in, PC-In VGA, S/PDIF out (coaxial), Common Interface

Electricity
- Ambient temperature: 5°C to 35°C
- Mains power: 100-240V, 50/60Hz
- Power consumption: 46.5 W
- Standby power consumption: <0.3 W

Dimensions
- Set dimensions (W x H x D): 468 x 349 x 69 mm
- Set dimensions with stand (W x H x D): 468 x 392 x 166 mm
- Weight incl. Packaging: 5.84 kg
- Product weight: 3.9 kg
- Product weight (+stand): 4.4 kg
- Box dimensions (W x H x D): 512 x 458 x 136 mm
- VESA wall mount compatible: 100 x 100 mm

Accessories
- Included Accessories: Tabletop stand, Power cord, Quick start guide, User Manual, Warranty certificate, Remote Control, Batteries for remote control



Product highlights

Crystal Clear III
Crystal Clear III combines a whole range of enhancements to provide a better picture. They include a 2D Comb filter, Dynamic contrast, Blue stretch and Green enhancement so that you always get the most natural looking colours.

LCD display, 1440 x 900p
This WXGA+ display with state-of-the-art LCD screen technology gives you widescreen HD resolution of 1440 x 900p pixels. It produces brilliant flicker-free progressive scan pictures with optimum brightness and superb colours. This vibrant and sharp image will provide you with an enhanced viewing experience.

HD Ready
Enjoy the exceptional picture quality of High Definition pictures and be fully prepared for HD sources like HDTV set-top boxes and Blu-ray discs. HD Ready is a protected label that offers picture quality beyond that of progressive scan. It conforms to strict standards laid out by EICTA to offer an HD screen that displays the benefits of resolution and picture quality of a High Definition signal. It has a universal connection for both analogue YPbPr and uncompressed digital connection of DVI or HDMI, supporting HDCP. It can display 720p and 1080i signals at 50 and 60 Hz.

5 ms on/off response time
On-Off response time is the period required for a liquid crystal cell to go from active (black) to inactive (white) and back to active (black) again. It is measured in milliseconds. Faster is better: lower response time means faster transitions and, therefore, results in fewer visible image artefacts in the display of transition of texts and graphics. On-Off response time is a more important measure in the display of business content like documents, graphs and photos.

2 HDMI inputs
HDMI makes an uncompressed digital RGB connection from the source to the screen for the ultimate picture quality. HDMI intelligently communicates the highest output resolution with the source device. The HDMI input is fully backwards-compatible with DVI sources and includes digital audio. HDMI uses HDCP copy protection. With one HDMI input on the back and one HDMI on the side of the TV you can connect multiple HD sources, for instance an HD set-top box, a Blu-ray player and a game console or digital camcorder. Your TV is fully prepared for the HD future.

EasyLink
EasyLink uses the HDMI CEC industry standard protocol to share functionality between connected devices and the TV. With EasyLink only one remote control is needed to operate main functionalities on your TV and connected devices. EasyLink uses the standard HDMI cable to transfer system commands. It works between all electronic devices equipped with HDMI CEC.

Smart mode
The optimum picture and sound depends on various aspects like the video source, content type, surroundings of the room, type of display device etc. Smart Mode has predefined picture and sound settings conveniently pre-set by the way you use your TV. The 'Personal' setting, allows you to define the picture settings according to your preference, store it and gain easy access for future selection. All these conveniently built into your TV for optimal settings.

Issue date 2009-01-22

Version: 1.0.4

12 NC: 8670 000 41245
EAN: 87 12581 43433 5

© 2009 Koninklijke Philips Electronics N.V.
All Rights reserved.

Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips Electronics N.V. or their respective owners.

www.philips.com